

**In the claims:**

The following constitutes a complete listing of claims and replaces all previously submitted listing of claims.

1. (Currently Amended) Apparatus for optimized electro-hydraulic pressure pulse generation, characterized in that comprising an electro-hydraulic shock wave system wherein said shock wave system is equipped with a measuring and control device (13a, 13b), which measures the a discharge current between the at least two electrode tips (4, 5).
- 2.(Currently Amended) Apparatus as claimed in claim 1, characterized in that wherein the measuring and control device (13a, 13b) measures the a discharge voltage.
- 3.(Currently Amended) Apparatus as claimed one of the foregoing claims, characterized in that in claim 1, wherein the measuring and control device (13a, 13b) defines the a discharge output.
- 4.(Currently Amended) Apparatus as claimed one of the foregoing claims, characterized in that in claim 1, wherein the measuring and control device (13a, 13b) compares at least one measured or control value with at least one set value.
- 5.(Currently Amended) Apparatus as claimed one of the foregoing claims, characterized in that the in claim 1, wherein an electrode distance (6)- between said electrode tips is variable.
- 6.(Currently Amended) Apparatus as claimed in claim 5, characterized in that wherein in case of deviation of at least one measured or control value from at least one set value, or in case of deviation of measured and control value curves from set value curves, the measuring and control device (13a, 13b) corrects the electrode distance (6).
- 7.(Currently Amended) Apparatus as claimed in one of the foregoing claims, characterized in that claim 1, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device (13a, 13b) corrects the a charging voltage.

8. (Cancelled)

9. (Currently Amended) Process for the generation of optimized electro-hydraulic pressure pulses characterized by the following process steps:

- a) Setting of the a RLC circuit and of the an electrode distance in an electro-hydraulic shock wave system to selected initial parameters;
- b) Initiation of the a discharging process,
- c) Determination of the a discharge current and at least one measured value by a measuring and control device,
- d) Comparison with at least one set value,
- e) Correction of a system parameter by a correction increment based on the a deviation from the set value, and
- f) Further with b),

10. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 1.

11. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 1.

12. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 2.

13. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 2.

14. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 3.

15. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 3.

16. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 4.

17. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 4.

18. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 5.

19. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 5.

20. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 6.

21. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 6.

22. (New) A method for extra-corporeally disintegrating concretions in human beings and other mammals comprising

administering to a human being or other mammal having at least one concretion at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 7.

23. (New) An extra-corporeal treatment method for treating at least one tissue of a human or other mammal comprising

administering to said tissue at least one electro-hydraulic shock wave, wherein said shock wave is delivered by the apparatus of claim 7.

24.(New) Apparatus as claimed in claim 2, wherein the measuring and control device defines a discharge output.

25.(New) Apparatus as claimed in claim 2, wherein the measuring and control device compares at least one measured or control value with at least one set value.

26.(New) Apparatus as claimed in claim 2, wherein an electrode distance between said electrode tips is variable.

27.(New) Apparatus as claimed in claim 26, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

28.(New) Apparatus as claimed in claim 2, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.

29.(New) Apparatus as claimed in claim 3, wherein the measuring and control device compares at least one measured or control value with at least one set value.

30.(New) Apparatus as claimed in claim 3, wherein an electrode distance between said electrode tips is variable.

31.(New) Apparatus as claimed in claim 30, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

32.(New) Apparatus as claimed in claim 3, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.

33.(New) Apparatus as claimed in claim 4, wherein an electrode distance between said electrode tips is variable.

34.(New) Apparatus as claimed in claim 33, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects the electrode distance.

35.(New) Apparatus as claimed in claim 4, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.

36. (New) Apparatus as claimed in claim 5, wherein

in case of deviation of at least one measured or control value from at least one set value, or

in case of deviation of measured and control value curves from set value curves, the measuring and control device corrects a charging voltage.